

**15th CHRIS MEETING
IHB, Monaco, 10-13 June 2003**

**REPORT OF THE STANDARIZATION OF NAUTICAL PUBLICATIONS WORKING
GROUP (SNPWG)**

(by Johannes Melles, Germany)

Chairman: Mr. Johannes MELLEES (Germany)

Vice-Chairman & Secretary Mr. Randy WHITE (USA, NIMA)

Members: Argentina, Cuba, Denmark, Estonia, France, Germany, India, Italy, Japan, Korea (Rep. of),
Russia, Spain, Sweden, Tunisia, UK, USA (NIMA & NOAA), IHB.

Introduction

Since the 13th CHRIS-Meeting in Athens, the SNPWG has new Terms of Reference, which clearly state that the WG should investigate the data format specifications, content and display requirements of digital nautical publications intended for use in ECDIS.

That means that the main task of the SNPWG has moved from the development of guidelines for the preparation of nautical publications in general to a more specific task, namely to develop guidelines for Nautical Publications intended for use in ECDIS (NP3).

The SNPWG started it's work in January 2003. Two SNPWG-Letters were sent out but it was quickly recognized that a "kick-off" meeting would be necessary to commence the new work of this working group.

2nd SNPWG-Meeting

The 2nd SNPWG-Meeting took place at BSH in Hamburg, Germany, 02-04 June, 2003. Twelve people representing 8 different nations attended this meeting. Detailed minutes from this meeting will be available on the IHO web site by the end of this month.

The attendees of this meeting made it clear that they were waiting for this working group to start it's work again. Everybody noted that their organizations wants to do something "digital" with their nautical publications however they were hesitant to proceed because of the lack of appropriate IHO guidelines..

This is not only important for the integration of NPs into ECDIS, but also impacts those hydrographic offices that are working on the development of new production lines, that would like to produce different products from the same database.

The content and data structure of NP3, will have a strong impact on the development on these internal databases.

Terms of Reference (TOR)

The members of the new SNPWG want to concentrate their work on the integration of information coming from NPs into ECDIS (NP3). This also seems to be the intention of CHRIS (see minutes of CHRIS13 and CHRIS14). But if you look at the latest version of the TOR the objective for the SNPWG is:

To develop guidelines for the preparation of nautical publications, primarily in a digital format compatible with ECDIS and secondly in paper and digital formats, as stand-alone publications.

This objective still states, that the SNPWG should also work on NP1 and NP2. This is also inconsistent with chapter 4 of the TOR "Execution". Therefore the working group wants to change the objective in the TOR as follows:

To develop guidelines for the preparation of nautical publications, in a digital format compatible with ECDIS.

Data Format for NP3

A very important question for the continuation of the work of the SNPWG is, which data format should be used for NP3. This topic was discussed at great length during the meeting in Hamburg and the participants of that meeting came to the conclusion, that the best data format for NP3 would be the S57 format (the pro and cons will be presented in the minutes of the SNPWG-Meeting).

Because this question is very important, a three month period (15 September 2003) will be given to all SNPWG Members to discuss this topic with their experts. After this three month period, SNPWG would like to have a decision. No response will be taken as agreed. Rejection has to be explained, if possible with an alternative solution.

Goals for the work of SNPWG

In the TOR the goals for the work of the SNPWG are described in a very general way. The working group has tried to describe them in a more detailed way.

- Content requirements
All NPs have to be analyzed to determine which content is needed for NP3
- Extension to S57
Additional "Object Classes", "Attributes" and "Attribute values" which can be used to encode NPs information have to be defined.
- Coding Guide
A coding guide for NPs which is similar to the "Use of the Object Catalogue for ENC" has to be developed.
- Extension to the ENC-Product Specifications
To navigate a ship the mariner needs a chart and a whole set of NPs. The chart could be replaced by ECDIS but in addition to the chart he still has to use printed NPs. The SNPWG is of the opinion that both parts the chart and the NPs have to be integrated into one system and therefore the ENC Product Specifications have to be extended.
- Extension of S57-Document or a new Special Publication (S-??)
So far the S57 describes everything around charts. Maybe it has to be extended that it also covers NPs but possibly we need a new Special Publication.
- Guidelines and basic rules for the display of NPs in ECDIS
For the display of NPs-data in an ECDIS, the working group wants to give as much freedom as possible to the manufacturers of ECDIS systems, but to ensure that some information will be displayed in the correct way under every condition, some basic rules and guidelines for the display are needed.
- Revision of the IHO Technical Resolutions
The IHO Technical Resolutions have to be revised in such a way, that they also cover NP3.

Liaison with other working groups

- TSMADWG
The extension of S57, the extension of the Product Specifications for ENC and the development of a coding guide for NPs is closely related to the work of the TSMADWG and therefore a close cooperation between the TSMADWG and the SNPWG is absolutely necessary. Such a cooperation should be possible because the chairman of the SNPWG is also member of the TSMADWG.
- CSMWG
When the SNPWG has to define the guidelines and the basic rules for the display of NPs-data in an ECDIS it has to liaise with the CSMWG.
- Other working groups as required

Carriage requirements

For some of the NPs there is a carriage requirement by IMO. When the NPs are integrated into an ECDIS and they are part of the ENC this new ENC must be accepted as the legal equivalent for paper charts and NPs by IMO. The SNPWG needs some guidance on this topic.

Working methods of the working group

- **The Open ECDIS Forum**
The existing discussion group will be replaced by a new one, concentrating on NP3. The members of the existing discussion group will be informed about this change, and invited to participate in the new topic.
- **The IHO Web Site**
The IHO web-site will be used as an archive for all SNPWG documents. It will contain a private and public section.
- **Meetings**
All participants of the Hamburg meeting were of the opinion that the SNPWG could not only work by correspondence, therefore the WG decided to have a meeting every year.
- **Participation of industry**
SNPWG wants to cooperate with industry, and will invite industry members, dependent on the topic.

Next Meeting

The 3rd SNPWG-Meeting will be at the facilities of NOAA in Washington DC, USA, (07-11 June 2004).

Recommendations

1. CHRIS is asked to approve the changes to the Terms of Reference of SNPWG.
2. Member States are asked to participate in the work of the SNPWG

Annexes

Annex A - Membership of SNPWG (June 2003)

Annex B - SNPWG Work Plan (June 2003)

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(June 2003)

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SNPWG Work Plan

Annex B

Work Item		Priority	Milestones	Remarks
A	Decide on the Data Format of NPs - Data intended for use in ECDIS (NP3)	High	Decision for a Data Format (September 2003)	Two options are discussed internationally: S57 or HTML. BSH has developed an extension to S57.
A.1	Look at existing systems on the market			
A.2	Evaluate the pros and cons			done
B	Define the content requirements of NPs - Data intended for use in ECDIS (NP3)	Medium	Content Specs (June 2004)	BSH has prepared a study how the NP of the future could look like. The extension to S57 developed by BSH covers all NPs
B.1	Examine the content of traditional NPs		September 2003	
B.2	Proposal discovery and distribution (BSH etc.)		September 2003	
B.3	Draft Content Specs		June 2004	
C	Develop basic display rules for NPs - Data intended for use in ECDIS (NP3)	Medium	Display rules (October 2004)	
D	Draft guidance documents	Medium	Guidance Docs (December 2004)	
D.1	Extension to ENC Product Specifications		December 2004	
D.2	Coding guide for NP-data for ENC		March 2005	
D.3	Draft S?? (if necessary)		June 2005	
E	Revise technical resolutions as required	Medium	Revised Technical Resolutions (December 2004)	A first revision of the Technical Resolutions was done by the old SNPWG
F	Liaise with other CHRIS WG's and other IHO and international bodies	Medium		
F.1	Prepare a proposal for TSMAD		TSMAD-Proposal (June 2004)	
F.2	Liaise with the CSMWG for the development of the display rules			
F.3	Liaise with other relevant WGs			

Status: 04.06.2003